

REMARKS/ARGUMENTS

Claims 1-20 are pending in the present application. Claims 1, 9, 14 and 15 were amended. No claims were canceled or added. Reconsideration of the claims is respectfully requested.

I. 35 U.S.C. § 102, Anticipation

The Office Action has rejected claims 1-2, 4-5, 7, 9-10, 12-16, 18-20 under 35 U.S.C. § 102 as being anticipated by Chen, Universal Hand-Free System for Cellular Phones in Combination with Vehicle's Audio Stereo System, U.S. Patent No. 6,349,223, February 19, 2002 (hereinafter "Chen"). This rejection is respectfully traversed.

Regarding claim 1, the Office Action states:

Re claim 1, Chen disclosed a method for managing an audio system volume in a vehicle (fig.2; col.1 line 1-13), the method comprising:

detecting a radio frequency transmission having a selected frequency through a sensor (col.2 line 55-67; col.3 line 45-62; fig.3-5/waveform frequency may be detected), wherein the selected frequency is indicative of a call for a mobile telecommunications device within the vehicle and responsive to detecting the radio frequency transmission, reducing the audio system volume, until an absence of the radio frequency transmission occurs indicating that the call has terminated (col.2 line 35-42; fig.2,col.2 line 47-52/incoming phone calls and cut-off of phone calls are being operated with system to adjust accordingly to the operation).

Office Action dated September 11, 2007, p. 2.

A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). All limitations of the claimed invention must be considered when determining patentability. *In re Lowry*, 32 F.3d 1579, 1582, 32 U.S.P.Q.2d 1031, 1034 (Fed. Cir. 1994). Anticipation focuses on whether a claim reads on the product or process a prior art reference discloses, not on what the reference broadly teaches. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 218 U.S.P.Q. 781 (Fed. Cir. 1983). In this case, each and every feature of the presently claimed invention is not identically shown in the cited reference, arranged as they are in the claims.

Claim 1, which is representative of claims 9, 14, and 15 with regards to similarly recited subject matter, recites:

1. A method for managing an audio system volume in a vehicle, the method comprising:

detecting, wirelessly, a radio frequency transmission having a selected frequency through a sensor, wherein the selected frequency is indicative of an incoming call to be received by a mobile telecommunications device within the vehicle; and

responsive to detecting the radio frequency transmission, reducing the audio system volume, until an absence of the radio frequency transmission occurs indicating that the call has terminated.

Chen fails to anticipate claim 1 as *Chen* fails to teach the features of "detecting, wirelessly, a radio frequency transmission having a selected frequency through a sensor, wherein the selected frequency is indicative of an incoming call to be received by a mobile telecommunications device within the vehicle," and "responsive to detecting the radio frequency transmission, reducing the audio system volume, until an absence of the radio frequency transmission occurs indicating that the call has terminated." The Office Action cites to *Chen*, column 2, lines 35-42, 47-52, and 55-67, column 3, lines 45-62, which are reproduced below for the Examiner's convenience, and Figures 2-5 of *Chen* as teaching these features.

The electronic switch 21 is activated by the acoustic source control CPU 24 to control the acoustic source of speakers 41 of the vehicle's audio stereo system 4 to be either from said vehicle's audio stereo system 4 or from a cellular phone 5. It can automatically turn off the vehicle's audio stereo system 4 when said cellular phone 5 is in an operational or receiving state and can automatically turn on the audio stereo system 4 upon the cellular phone 5 being cut off.

The amplifier and acoustic quality processing circuitry 23 amplifies incoming signals of the cellular phone 5 for consecutive acoustic output and eliminates crosstalk and echo in signal transmission, improving the acoustic quality of the cellular phone by increasing acoustic fidelity in communication.

As the signal cable 3 is hooked up between a cellular phone 5 and a hand-free embodiment 2 of the hand-free system, signal voltages are permitted to be transmitted from the cellular phone 5 to the acoustic source control CPU 24. Signals, regardless of having high H1 (A1), low L0 (A2) or serial-pulse wave form (A3), as shown in FIGS. 3, 4, and 5, all are set to have an initial value (i.e., a standby value). As a cellular phone outputs signals (i.e., on variation of standby signals), the signal voltages are changed into their reverse phase respectively, as shown in FIGS. 3, 4, and 5). Accordingly, signal H1 (A1) is changed into L0 (B1) and LO (A2) into H1 (H2) or serial-pulse wave form into LO or H1 as a result of conversion by a CPU circuitry in the signal cable. Accordingly, the electronic switch 21 is activated by a signal from the acoustic source control CPU 24 to simultaneously transmit incoming acoustic voices of the cellular phone 5 to the speakers 41 of the vehicle's audio stereo system for output and turn-off the audio stereo system 4.

As shown in FIGS. 3, 4, and 5, the standby status A and operation status B of general cellular phones are classified into 3 types. The first and second types of voltage variations between a standby status and operation status are from high (A1) to low (B1) or from low (A2) to high (B2) respectively. In case of the third type of a signal voltage in a serial-pulse waveform, the variation between the standby status A3 and operation status B3 is simply the difference in the frequency of the serial pulse per unit time. Under such a circumstance, a CPU circuitry is disposed in the signal cable 3 for the purpose of discernment of the signals. As a wave form of a standby status is detected, the CPU

circuitry will deliver a LO or HI signal for replacement of the serial-pulse wave form. In case of a wave form of an operation status is detected, CPU circuitry will transmit a HI or LO signal as a substitute.

None of the cited passages of *Chen* teaches the feature of wirelessly detecting a radio frequency transmission. Rather, illustrated in Figures 1, 2, 6, and 8, *Chen* teaches that this detection is performed using the connecting cable shown. *Chen* describes the process of detecting a phase change in a voltage over the cable in numerous passages, including column 2, line 53 through column 3, line 3 and column 3, line 63 through column 4, line 36. Thus, *Chen* fails to teach, "detecting, wirelessly, a radio frequency transmission having a selected frequency through a sensor, wherein the selected frequency is indicative of a call for a mobile telecommunications device within the vehicle to receive."

The passage of *Chen* in column 2, lines 35-42 merely teaches a system wherein an acoustic control source CPU can turn on and off a vehicle's audio stereo system depending upon whether a cell phone is in use. The passage of *Chen* in column 2, lines 47-52 merely teaches that his system includes an amplifier and acoustic quality processing circuitry that increase acoustic fidelity of incoming audio signals from a cell phone.

The passage of *Chen*, column 3, lines 45-62, and Figures 3-5 teaches that when a cell phone is active, a signal voltage is changed from standby to the alternate form shown. Thus, when a cell phone is on, the voltage changes, and this change is detected by a sensor. Thus, the passage teaches detecting a change in voltage that indicates that cell phone is an active mode. In contrast, claim 1 recites, "the selected frequency is indicative of an incoming call to be received by a mobile telecommunications device within the vehicle." Claim 1, recites detecting a signal that indicates that there is a call for the cell phone to receive. In contradistinction, *Chen* teaches recognizing a change in a voltage signal that indicates the cell phone is now active. That is, as taught by *Chen*, the cell phone has already received the call before the detecting is performed.

The passage of *Chen* in column 2, lines 55-67, merely teaches that upon detecting a change in voltage signals, a CPU transmits the incoming acoustic voices over the speakers of the car audio system and turns off the actual audio stereo/radio. Thus, the passage teaches detecting a change in voltage that indicates that the cell phone is an active mode. In contrast, claim 1 recites, "the selected frequency is indicative of an incoming call to be received by a mobile telecommunications device within the vehicle." Claim 1, recites detecting a signal that indicates that there is a call for the cell phone to receive. In contradistinction, *Chen* teaches recognizing a change in a voltage signal that indicates the cell phone is now active. That is, as taught by *Chen*, the cell phone has already received the call before the detecting is performed.

Thus, for at least the reasons set forth above, Applicants submit that *Chen* fails to teach the feature of "detecting, wirelessly, a radio frequency transmission having a selected frequency through a sensor, wherein the selected frequency is indicative of an incoming call to be received by a mobile telecommunications device within the vehicle." Therefore, *Chen* fails to anticipate claim 1.

Additionally, *Chen* fails to teach, "responsive to detecting the radio frequency transmission, reducing the audio system volume, until an absence of the radio frequency transmission occurs indicating that the call has terminated." As *Chen* fails to teach detecting the radio frequency transmission that indicates that there is a call for the cell phone to receive, logically *Chen* also fails to teach responsive to detecting the radio frequency transmission, reducing the audio system volume, until an absence of the radio frequency transmission occurs indicating that the call has terminated. *Chen* also fails to teach reducing the audio system volume, until an absence of the radio frequency transmission occurs indicating that the call has terminated. *Chen*, in column 3, lines 1-3, states that the incoming acoustic voices of the cellular phone are transmitted to and over the speakers of the vehicle's audio system. Simultaneously, the stereo is turned off. Also, in column 4, lines 7-15 state:

Then the acoustic source control CPU sends off a signal to control the electronic switch 21 to turn the audio stereo system for mute or cut off the power supply to the audio stereo system, and to connect the input terminal of speakers 41 to the hand-free embodiment 2. Thereby after the incoming voice signal of the cellular phone 5 is adjusted by the amplifier and acoustic quality processing circuitry 23 to increase its fidelity, the electronic switch 21 is actuated to make the voice broadcast via the speakers 41.

This passage teaches that in another embodiment, rather than transmitting the acoustic voices of the cellular phone to the speakers of the vehicle's audio system, the input terminal of the speaker's audio stereo system are connected to the hand free phone. Thus, in both embodiments taught by *Chen*, the audio signal of the cellular phone is transmitted over the speakers of the vehicle's stereo system. Further, the radio is thus prevented from broadcasting any sound over the same speakers, as the stereo is denied access to the speakers while the cell phone is an active state. In contradistinction, claim 1 recites reducing the audio system volume. Claim 4 recites that the volume is reduced to a pre-selected volume and claim 5 claims this pre-selected volume is zero. Thus, by claim differentiation, reduction to an audible level is contemplated by claim 1. *Chen* prevents sound of the radio from being broadcast over the speakers at all; thus, *Chen* does not teach that the volume is audible. Further, claim 1 is not limited to only reducing the volume to a pre-selected volume. Rather, by claim differentiation, reducing the volume as recited in claim 1 contemplates reducing the volume by a specific amount, rather than just to a specific level. *Chen* merely recites reducing the volume to a specific level, the level of zero. A "no" volume is the only setting

taught by *Chen*. Thus, *Chen* cannot teach reducing the volume by a certain amount, because, depending on the volume setting when the phone becomes active, that would not result in turning off the stereo, which is what *Chen* teaches.

Therefore, as recited in claim 1 the sound of the stereo is still being broadcast over the speakers of the stereo, however, the volume is lowered. Applicants submit *Chen* does not teach this feature. Thus, *Chen* fails to teach the feature of "responsive to detecting the radio frequency transmission, reducing the audio system volume, until an absence of the radio frequency transmission occurs indicating that the call has terminated."

As taught by *Chen*, then voices in the active phone call are transmitted over the speakers of the vehicle's audio system, thus the occupants of the vehicle are deprived of listening to the original programming that was being transmitted through the speakers before the call became active. Further, as taught by *Chen*, the preventing of the vehicle's audio system from producing sound over the speakers only occurs once the phone has an active phone call. In contradistinction, claim 1 recites "responsive to detecting the radio frequency transmission, reducing the audio system volume, until an absence of the radio frequency transmission occurs indicating that the call has terminated." Therefore, as the radio frequency transmission is "indicative of indicative of an incoming call to be received by a mobile telecommunications device within the vehicle," the volume of the vehicle's radio is reduced prior to the initiation of the call. Thus, the volume is reduced when the mobile communications device is still ringing, or otherwise indicating that there is a call to be received, which provides the user an increased ability to notice the indication that there is a call to be received and therefore actually pick up, or receive, the call.

Therefore, for at least the reasons set forth above, Applicants submit that *Chen* fails to anticipate claim 1, as *Chen* fails to teach each and every feature of claim 1. As claim 1 is representative of claims 9, 14, and 15, the same distinctions between claim 1 and *Chen* apply to these claims as well. Therefore, Applicants submit that independent claims 1, 9, 14, and 15 are in condition for allowance over the *Chen* reference. Since claims 2, 4-5, 7, 10, 12, 13, 16, and 18-20 depend from claims 1, 9, 14, and 15, the same distinctions between *Chen* and the claimed invention in claims 1, 9, 14, and 15 apply for these claims. Therefore, Applicants submit that claims 2, 4-5, 7, 10, 12, 13, 16, and 18-20 are also in condition for allowance over the cited reference at least by virtue of depending from an allowable claim. Additionally, claims 2, 4-5, 7, 10, 12, 13, 16, and 18-20 claim other additional combinations of features not suggested by the reference. For example, claim 5 recites the feature of "wherein the audio system volume is reduced to a preselected volume." *Chen* fails to teach such a feature.

Therefore, the rejection of claims 1-2, 4-5, 7, 9-10, 12-16, 18-20 under 35 U.S.C. § 102 has been overcome.

II. 35 U.S.C. § 103, Obviousness (Claim 6)

The Office Action has rejected claim 6 under 35 U.S.C. § 103 as being unpatentable over *Chen* and further in view of *Kinzelow et al.*, System for Interfacing a Communication Device with a Radio for Hands-Free Operation, U.S. Patent No. 6.052.603, April 18, 2000 (hereinafter “*Kinzelow*”). This rejection is respectfully traversed.

Regarding claim 1, the Office Action states:

Re claim 6, the method of claim 1 with a sensor (fig.2 (5/phone with sensor incorporated). However, *Chen* is silent in regard wherein the sensor is an antenna configured to detect radio frequency signals. However, *Kinzelow et al.* did specifically disclose of a system with a sensor being an antenna configured to detect radio frequency signals (fig.3 wt (14.26,18); col.2 line 55-56) for the purpose of reproducing radio frequency signals over the speaker audio system, thus taking the combined teaching of *Chen* and *Kinzelow et al.* as a whole, it would have been obvious for one of the ordinary skill in the art to have incorporated such the limitation by having a system with a sensor being an antenna configured to detect radio frequency signals for the purpose of reproducing radio frequency signals over the speaker audio system.

Office Action dated September 11, 2007, p. 6.

Claim 6 is dependent on independent claim 1. As argued above in Section I, *Chen* fails to teach all the features of claim 1. *Kinzelow* fails to cure the deficiencies of *Chen*. *Kinzelow* fails to teach the features missing from *Chen*, the features of “detecting a radio frequency transmission having a selected frequency through a sensor, wherein the selected frequency is indicative of a call for a mobile telecommunications device within the vehicle,” and “responsive to detecting the radio frequency transmission, reducing the audio system volume, until an absence of the radio frequency transmission occurs indicating that the call has terminated.” The Office Action does not cite to any portion of *Kinzelow* as teaching these features, nor does any portion of *Kinzelow* teach these features. Therefore, *Kinzelow* fails to cure the deficiencies of *Chen*.

Further, even assuming *arguendo* that *Kinzelow* did cure the deficiencies of *Chen*, one would still not be motivated to combine *Chen* with *Kinzelow* in order to form the invention as recited in claim 6. *Chen* teaches a system wherein the cellular phone is connected to the audio system directly through a cable. Thus, there is no reason to add an antenna that detects radio frequencies to the system of *Chen*, wherein *Chen* is a system that detects the change in phase of a voltage signal.

Thus, for at least the reasons set forth above, the combination of *Chen* in view of *Kinzelow* fails to anticipate claim 1. Therefore, Applicants submit that claim 1 is in condition for allowance over the cited references *Chen* in view of *Kinzelow*. As claim 6 is dependent from claim 1, Applicants submit that claim 6 is also in condition for allowance due to its dependency on an allowable based claim, claim 1.

Therefore, the rejection of claim 6 under 35 U.S.C. § 103 has been overcome.

III. 35 U.S.C. § 103, Obviousness (Claims 3, 17, and 11)

The Office Action has rejected claims 3, 17, and 11 under 35 U.S.C. § 103 as being unpatentable over *Chen* and further in view of Office Notice. This rejection is respectfully traversed.

Regarding claim 3, the Office Action states:

RE claim 3, Chen disclose of the method of claim 1, wherein the incoming phone calls and selected frequency are being transmitted over the radio system (fig.7; col.3 line 50-60; col.1 line 5-15). However, Chen fail to disclose of the specific of wherein the selected frequency has a range from about 890 MHz to about 960 MHz. However, official notice is taken that the concept of transmitting such selected frequency in the range of 890 MHz to about 960 MHz is commonly known in the art, thus it would have been obvious for one of the ordinary skill in the art at the time of the invention to have incorporated the specific of transmitting such selected frequency in the range of 890 MHz to about 960 MHz for the purpose of reproducing the incoming phone calls of the audio signals over the radio system speakers.

Office Action dated September 11, 2007, p. 7.

Claim 3 is dependent on independent claim 1. As argued above in Section I, *Chen* fails to teach all the features of claim 1. Office Notice fails to cure the deficiencies of *Chen*. The Office Notice fails to teach the features missing from *Chen*, the features of "detecting a radio frequency transmission having a selected frequency through a sensor, wherein the selected frequency is indicative of a call for a mobile telecommunications device within the vehicle." and "responsive to detecting the radio frequency transmission, reducing the audio system volume, until an absence of the radio frequency transmission occurs indicating that the call has terminated." Therefore, Office Notice fails to cure the deficiencies of *Chen*.

Thus, for at least the reasons set forth above, the combination of *Chen* in view of Office Notice fails to anticipate claim 1. Therefore, Applicants submit that claim 1 is in condition for allowance over the cited references *Chen* in view of Office Notice. As claims 3, 17, and 11 are dependent from claims 1, 9, and 15, Applicants submit that claims 3, 17, and 11 is also in condition for allowance due to its dependency on an allowable base claim, claims 1, 9, and 15.

Therefore, the rejection of claims 3, 17, and 11 under 35 U.S.C. § 103 has been overcome.

IV. 35 U.S.C. § 103, Obviousness (Claim 8)

The Office Action has rejected claim 8 under 35 U.S.C. § 103 as being unpatentable over *Chen* and further in view of *Nguyen et al.*, Method and Apparatus for an In-Vehicle Audio System, U.S. Patent Publication No. 2004/0078104, April 22, 2004 (hereinafter "Nguyen"). This rejection is respectfully traversed.

Regarding claim 8, the Office Action states:

Re claim 8, the method of claim 5. However, Chen fail to disclose of the wherein the preselected volume is user configurable. However, Nguyen et al. disclose of having a system wherein the preselected volume is user configurable (fig. 1 (104; page 2[0033] line 7-10; page 5[0071]) for the purpose of allowing the user to hear the caller and yet continue enjoying the audio sound system at the same time. Thus, taking the combined teaching of Chen and now Nguyen et al. as a whole, it would have been obvious at the time of the invention to have incorporated the having a system wherein the preselected volume is user configurable for the purpose of allowing the user to hear the caller and yet continue enjoying the audio sound system at the same time.

Office Action dated September 11, 2007, pp. 8-9.

Claim 8 is dependent on independent claim 1. As argued above in Section I, Chen fails to teach all the features of claim 1. Nguyen fails to cure the deficiencies of Chen. Nguyen fails to teach the features missing from Chen, the features of "detecting a radio frequency transmission having a selected frequency through a sensor, wherein the selected frequency is indicative of a call for a mobile telecommunications device within the vehicle," and "responsive to detecting the radio frequency transmission, reducing the audio system volume, until an absence of the radio frequency transmission occurs indicating that the call has terminated." The Office Action does not cite to any portion of Nguyen as teaching these features, nor does any portion of Nguyen teach these features. Therefore, Nguyen fails to cure the deficiencies of Chen.

Thus, for at least the reasons set forth above, the combination of Chen in view of Nguyen fails to anticipate claim 1. Therefore, Applicants submit that claim 1 is in condition for allowance over the cited references Chen in view of Nguyen. As claim 8 is dependent from claim 1, Applicants submit that claim 8 is also in condition for allowance due to its dependency on an allowable based claim, claim 1.

Therefore, the rejection of claim 8 under 35 U.S.C. § 103 has been overcome.

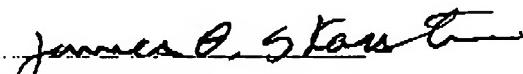
V. **Conclusion**

It is respectfully urged that the subject application is patentable over the cited references and is now in condition for allowance.

The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,



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